

## SEQUENCE LISTING

<110> Curiel, David T.  
Krasnykh, Victor N.  
Dmitriev, Igor

<120> Adenovirus Vector Containing A Heterologous Peptide  
Epitope in the HI Loop of the Fiber Knob

<130> D6080

<140> 09/245,603

<141> 1999-02-05

<150> US 60/099,801  
US 60/073,947

<151> 1998-09-10  
1998-02-06

<160> 17

<210> 1

<211> 38

<212> DNA

<213> artificial sequence

<220>

<221> primer\_bind

<223> Forward primer F1 used to generate a gene encoding  
the Ad5 fiber knob domain with the HI loop deleted.

<400> 1  
taaggatccg gtgccattac agtaggaaac aaaaataa 38

<210> 2

<211> 43

<212> DNA

<213> artificial sequence

<220>

<221> primer\_bind

<223> Reverse primer R1 used to generate a gene encoding  
the Ad5 fiber knob domain with the HI loop deleted.

<400> 2  
catagagtat gcagatatcg ttagtggttac aggtttagtt ttg 43

SEQ 1

<210> 3  
<211> 42  
<212> DNA  
<213> artificial sequence  
<220>  
<221> primer\_bind  
<223> Forward primer F2 used to generate a gene encoding  
the Ad5 fiber knob domain with the HI loop deleted.  
<400> 3  
gtaacactaa cgatatctgc atactctatg tcattttcat gg 42

<210> 4  
<211> 41  
<212> DNA  
<213> artificial sequence  
<220>  
<221> primer\_bind  
<223> Reverse primer R2 used to generate a gene encoding  
the Ad5 fiber knob domain with the HI loop deleted.  
<400> 4  
cccaagctta caattgaaaa ataaacacgt tgaaacataa c 41

<210> 5  
<211> 63  
<212> DNA  
<213> artificial sequence  
<220>  
<223> Oligonucleotide annealed with SEQ ID NO: 6 to form a  
duplex and cloned into *EcoRV*-digested pQE.KNOBDHI.  
<400> 5  
tacactaaac ggtacccagg aaacaggaga cacaactgac tacaaggacg acgatgacaa 60  
gcc 63

<210> 6  
<211> 63

SEQ 2

&lt;212&gt; DNA

&lt;213&gt; artificial sequence

&lt;220&gt;

<223> Oligonucleotide annealed with SEQ ID NO: 5 to form a duplex and cloned into *EcoRV*-digested pQE.KNOBDHI.

&lt;400&gt; 6

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ggcttgatcat cgctgcctt gtagtcagtt gtgtctcctg tttcctgggt accgtttagt 60
gta                                                    63

```

&lt;210&gt; 7

&lt;211&gt; 29

&lt;212&gt; DNA

&lt;213&gt; artificial sequence

&lt;220&gt;

<223> Oligonucleotide used in synthetic duplex which encodes MetHis<sub>6</sub>Lys.

&lt;400&gt; 7

```

gatccatgca tcaccatcac catcacaag          29

```

&lt;210&gt; 8

&lt;211&gt; 29

&lt;212&gt; DNA

&lt;213&gt; artificial sequence

&lt;220&gt;

<223> Oligonucleotide used in synthetic duplex which encodes MetHis<sub>6</sub>Lys.

&lt;400&gt; 8

```

cgcgcttgatg atggtgatgg tgatgcatg          29

```

&lt;210&gt; 9

&lt;211&gt; 16

&lt;212&gt; DNA

&lt;213&gt; artificial sequence

&lt;220&gt;

<223> An *NdeI*-*SwaI* linker ligated to plasmid pTG3602 after

SEQ 3

partial digestion of the plasmid with *NdeI*.

```

<400>      9
taccatttta aatggg                               16

<210>      10
<211>      66
<212>      DNA
<213>      artificial sequence
<220>
<223>      Oligonucleotide in duplex cloned into EcoRV site
              of plasmid pQE.KNOBDHI generating pQE.KNOB.RGDHI.

<400>      10
cacactaaac ggtacacagg aaacaggaga cacaacttgt gactgccgcg gagactgttt 60
ctgccc                                           66

<210>      11
<211>      66
<212>      DNA
<213>      artificial sequence
<220>
<221>      primer_bind
<223>      Oligonucleotide in duplex cloned into EcoRV site
              of plasmid pQE.KNOBDHI generating pQE.KNOB.RGDHI.

<400>      11
gggcagaaac agtctccgcg gcagtcacaa gttgtgtctc ctgtttcctg tgtaccgttt 60
agtgtg                                           66

<210>      12
<211>      41
<212>      DNA
<213>      artificial sequence
<220>
<223>      Oligonucleotide in synthetic duplex used to
              replace 41 bp PacI-ClaI-fragment in pcDNA.Luc,
              generating pcLucPC1.

<400>      12

```

SEQ 4

caaatacaaaa ggatatcagg tggccccgc tgaattggag t

41

<210> 13

<211> 45

<212> DNA

<213> artificial sequence

<220>

<223> Oligonucleotide in synthetic duplex used to replace 41 bp *PacI*-*ClaI*-fragment in pCDNA.Luc, generating pcLucPC1.

<400> 13

cgactccaat tcagcggggg ccacctgata tcctttgtat ttgat

45

<210> 14

<211> 13

<212> PRT

<213> artificial sequence

<220>

<223> Amino acid sequence deleted from the HI loop of the fiber knob domain and replaced with a unique *EcoRV* site.

<400> 14

Thr Leu Asn Gly Thr Gln Glu Thr Gly Asp Thr Thr Pro

5

10

<210> 15

<211> 8

<212> PRT

<213> artificial sequence

<220>

<223> Amino acid sequence of the FLAG octapeptide.

<400> 15

Asp Tyr Lys Asp Asp Asp Asp Lys

5

<210> 16

SEQ 5

<211> 9  
<212> PRT  
<213> artificial sequence  
<220>  
<223> Amino acid sequence of a RGD peptide incorporated  
into the region of the fiber gene within the HI loop.  
<400> 16

Cys Asp Cys Arg Gly Asp Cys Phe Cys  
5

<210> 17  
<211> 13  
<212> PRT  
<213> artificial sequence  
<220>  
<223> Amino acid sequence of peptide replacing the  
RGD coding sequence.  
<400> 17

Thr Leu Asn Gly Thr Gln Glu Thr Gly Asp Thr Thr Pro  
5 10

SEQ 6